



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

A LATIN FORM TEST

For Use in High School Classes

By LAWRENCE L. LOHR, JR., A. M.*

DURING THE LAST few years there has been a remarkable amount of interest and activity manifested in devising and using tests or scales for measuring the work of the classroom. There have been devised scales for measuring ability in the four fundamental processes in arithmetic, scales for handwriting, reading, spelling, language, composition, drawing, etc. They have been fairly well standardized and are being used with great success in an ever-increasing number of schools. So far, almost all of the work that has been done in this direction has been in connection with the elementary school subjects. There have been only a few attempts to carry this work on into the high school. There are tests in the process of standardization in the following high school subjects: Physics, History, Latin, French, German and Algebra.

The tests in the languages just mentioned are of two kinds, a vocabulary test and a translation test. As far as we know, there are no tests devised to measure the pupil's knowledge of word *forms* in these languages. The Latin Form Test which is here described is a first attempt to work out this kind of test.

It was the plan of several members of the faculty in the School of Education of the University to attempt to devise a three-fold Latin test, one part being a test of vocabulary, another being a test of translation, and the third part, the form test. So far there has been no work done except on the part that deals with the forms. It is the work done on this form test that serves as the basis of this study.

In working out the plan for making the test there was nothing available which could be used as a guide. Everything, therefore, had to be done for the first time, and it was often necessary to change the method of procedure. In all the work, however, the central idea has been to include in the list of forms used only those of most common occurrence in high school Latin.

This plan was decided upon after investigating the nature of the several vocabulary tests already worked out for French, German and Latin. The Latin Test, as devised by Prof. Starch, of the University of Wisconsin, is described here in order to make clear the reasons for using only the commonest forms in the Latin Form Test. This vocabulary test is composed of two sets of 100 words each selected by the following method:

"The first word on every 20th page of Harper's Latin Dictionary was chosen. Every 20th page was selected because that gave 100 words scattered at uniform intervals throughout the entire vocabulary. List I was made up by taking the first word from pages 20, 40, 60, etc. List 2 was made up by taking the first word from pages 21, 41, 61, etc.

"This method of selection has three distinct advantages. First, it gives a representative and uniform sampling of the entire Latin vocabulary. Second, the score obtained has a definite significance in the sense that it indicates the percentage of words of the entire Latin vocabulary that a person knows. If a pupil knows 25 words of each list, it means that he knows 25 per cent of the entire vocabulary. Third, any number of additional lists that may be desired can be made up by following the same plan of selection."¹

A partial list of the words used in one of the tests is given below for the purpose of showing the kind of words that are selected by this method.

LATIN VOCABULARY TEST I

After each Latin word that you know, write the number of its English equivalent.

LATIN WORDS

- | | |
|------------------|-------------------|
| 1. accusabilis | 11. balatro |
| 2. admirabiliter | 12. bisolis |
| 3. aereus | 13. caducarius |
| 4. alatus | 14. canon |
| 5. alatucius | 15. cata |
| 6. anhelatio | 16. certatim |
| 7. apparatus | 17. circummunitio |
| 8. argutatio | 18. coercitio |
| 9. assignatio | 19. commistim |
| 10. auctorō | 20. concienens |

The English equivalents then follow in a list arranged alphabetically, each word having a number.

There are altogether 100 words in the list, and a very large number of them are words such as those just given. Undoubtedly, the average high school pupil does not know more than a very few words in the whole list. A glance at the words used will convince anyone of the truth of this general assertion. As a further proof, one need only to turn to Lodge's *Vocabulary of High School Latin* where he will find that only two of the twenty words just given occur at all in the whole four books of Cæsar, four orations of Cicero, and six books of Virgil read by high school

* Reprinted from the HIGH SCHOOL JOURNAL for November and December, 1918.

¹ Starch, *Educational Measurements*, pp. 174-175. Macmillan, 1916.

Latin classes. The word *aereus* occurs four times in Virgil, and the word *certatim* occurs three times in the same author. The other words do not occur at all. Just how many of the other words in the whole list do not occur in the high school Latin texts could be determined readily from the above mentioned book. Certainly only a small number do occur, and the number is so small that one naturally questions the real value of the test as a whole. It would seem that a list of words made up from the real high school Latin vocabulary would be far better than this list of rare and unusual words.

In working out the general plan for the Latin Form Test it was thought best, therefore, to have the test made up not of rare and irregular forms, but rather of those forms which are most often found in high school work. It was thought that a test of this kind would be of more value in determining the pupil's knowledge of the forms of the Latin language. A list that includes a lot of very uncommon forms would be even less usable than the vocabulary test that contained so many unusual words.

The first step in devising the test seemed to be to

find out in a general way what topics to include in the list. A careful study was made of sixteen textbooks* widely used in first year Latin classes for the purpose of finding out which topics received the greatest amount of emphasis. From the table of contents in each textbook the total number of lessons spent on each topic was ascertained. For example, there was a total of thirty-one lessons on demonstrative pronouns, a total of seventy-seven on the third declension, etc.

After the total number of lessons on each of about forty different topics had been worked out, the next step was to get the average number of lessons on

- * 1. Collar and Daniell, *First Year Latin*.
2. D'Ooge, *Latin for Beginners*.
3. Gunnison and Harley, *Latin for the First Year*.
4. Smith, *Latin Lessons*.
5. Bain, *First Latin Book*.
6. Pearson, *Essentials of Latin*.
7. B. C. Smith, *Elements of Latin*.
8. Kirtland and Rogers, *Introduction to Latin*.
9. Nutting, *A Latin Primer*.
10. Bennett, *First Year Latin*.
11. Montgomery, *A Year in Latin*.
12. Roberts and Rolfe, *Essential Latin Lessons*.
13. Scott, *Elementary Latin*.
14. Hale, *A First Latin Book*.
15. Moulton, *Introductory Latin*.
16. Janes and Jenks, *Bellum Helveticum*.

DETAILED RESULTS OF STUDY OF 16 FIRST-YEAR LATIN BOOKS

Number of Lessons Spent On.	Number of the Book Examined																Tot.	Av.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
1st declension.....	4½	2	2	1	2	3	1	1	1	1½	2	1	1½	1½	2½	2	29½	1.8
2nd declension.....	3½	4	2	2	4	4	2	2	3	1½	4	1	2½	2	2	3	42½	2.7
3rd declension.....	4	3	5	3	9	4	3	5	2	4	13	3	5	5	5	4	77	4.8
4th declension.....	1	1	1	1	1	1	½	1	1	½	1	1	1	1	1	1	15	1.0
5th declension.....	1	1	1	1	1	1	½	1	1	½	1	1	1	1	1	1	15	1.0
1st conjugation.....	3½	2	2½	2	6	4	2½	2	1	½	3	1	3	3	3	1½	42	2.6
2nd conjugation.....	3½	2	2½	1	4	1	1	2	6	1	1	1	3	3	3	1½	36½	2.3
3rd conjugation.....	2	2	2	2	4	2	1	2	1	1	2	1	2	2½	2½	1½	30½	1.9
4th conjugation.....	1	2	2	1	2	1	1	2	1	1	1	1	2	2½	2	1½	24	1.5
Verb—Sum.....	2	3	2	1	1	2	2	2	5	1	1	2	1½	1	2	2	30½	1.9
Demonstrative Pronoun.....	3	2	2½	1	2	2	1	2	1	1½	½	3	2½	2	2	3	31	2.0
Interrogative Pronoun.....	1	½	½	1	½	0	½	1	1	½	½	½	1	½	½	½	10	.6
Relative Pronoun.....	1	½	½	1	1	1	½	1	1	½	2	1	1	½	½	1	14	.9
Personal Pronoun.....	½	½	½	1	1	½	1	1	3	½	½	½	½	½	½	½	13	.8
Reflexive Pronoun.....	½	½	½	½	½	½	0	½	½	½	0	½	½	½	½	½	8	.5
Intensive Pronoun.....	0	½	½	½	½	½	½	½	0	½	½	½	½	½	0	½	6½	.4
Indefinite Pronoun.....	1	1	½	1	1	1	1	1	0	½	½	½	1	1	1	1	13	.8
Adj. 3rd. dec.....	1	1	1	2	3	2	1	1	1	1½	1	1	2	2	1	2	23½	1.5
Possessive Adj.....	1	1	1	1	½	1	½	1	½	½	½	½	½	1½	½	½	12	.8
Comparison Adj.....	3	4	2	2	2	2	2½	2	1	2	1	2	2	1	2	2	32½	2.0
Irregular Adj.....	1	1	3	1	1	1	1	1	½	½	½	½	1	1	1½	1	17	1.0
Comparison Adv.....	1	1	1	1	1	1	1	1	½	1	½	1	1	1½	1	2	16½	1.0
Passive Voice.....	3	4	4	4	9	3	5	6	4	5	4	3	4	5	2	5	70	4.4
Subjunct. Mood.....	2	6	5	6	6	4	4	5	4	4	5	3½	8	4	3	2½	76	4.8
Numerals.....	2	2	2	1	1	1	½	2	2½	1	½	1	1	1	1	1	20½	1.3
Participles.....	3	1	2	1	1	2	1	1	2	2	2	2½	5	2½	2	2	32	2.0
Gerund.....	1	½	1	1	1	1	½	1	½	0	2	1	2	1	½	1	15	1.0
Supine.....	1	½	½	0	1	½	½	1	0	0	1	1	1	0	½	1	9½	.6
Deponent Verbs.....	1	1	1	1	2	1	1	2	1	1	2	1	3	1	1	0	20	1.3
Irregular Verbs.....	2	3	4	2	4	3	2	4	6	5	1	3	7	3	3	2½	54½	3.4
Periphrastic.....	1	0	½	1	1	1	½	0	0	1	0	1	0	1	0	1	9	.5
Impersonal Verbs.....	1	0	1	1	1	½	0	0	0	1	½	0	1	0	1	1	8½	.5
Imperative Mood.....	½	½	½	1	1	1	½	1	1	1	1	1	2	1½	2	1	16½	1.0
Adj. 1st and 2nd dec.....	1	1	1	1	1	1	1	1	2	2	2	4	2	1	1	2	23	1.5
3rd. conj. verbs <i>io</i>	½	1	½	1	1	½	1	1	2	1	0	1	1	1	1½	1	15	1.0
Compounds <i>Sum</i>	1½	1	2	1½	2	1½	1½	1	1	1	½	1	1	1	½	½	12	.8
Infinitive.....	1	1	1½	1	1	2	1	1½	1	0	2	2	2½	1½	1	1	21	1.3

each topic. This was done by dividing the total number of lessons by sixteen, which was the number of books investigated. To illustrate, when the total of thirty-two lessons on participles was divided by sixteen, it gave an even two lessons as the average number of lessons on participles. The fourth declension had an average of one lesson per book, etc.

The table given here shows the detailed results of the study of the sixteen first year Latin books. It gives the distribution of the lessons on each topic in the different books, and also shows the total number and the average number of lessons spent on each topic.

These averages then were arranged in ascending order. Under such arrangement, intensive pronouns was the topic coming first in the list. It had an average of four-tenths of a lesson per book. The topics, *subjunctive mood* and *third declension* came last with an average of four and eight-tenths lessons per book. The other topics ranged all the way between these two allotments.

This arrangement clearly showed that a great number of the topics received only a small amount of attention in the textbooks. Since the purpose of examining the books was to find out those topics which received the greatest amount of emphasis, it was decided to throw out of consideration all of those topics which had an average of less than two lessons. Although two of these topics, the verb *sum* and the *third conjugation*, did not have exactly two lessons per book, they came so close to the requirement that they were included. This step left twelve of the original forty topics as follows:

Topic	Av. No. Lessons
Verb <i>sum</i>	1.9
3rd conjugation	1.9
Demonstrative pronouns	2.0
Comparison of adjectives	2.0
Participles	2.0
2nd conjugation	2.3
1st conjugation	2.6
2nd declension	2.7
Irregular verbs	3.4
Passive voice	4.4
Subjunctive mood	4.8
3rd declension	4.8

Using these twelve topics as a basis, a list of fifty words was drawn up. Each topic was represented in the list by a number of words proportional to the average number of lessons which it had received in the textbooks. The number of words that each topic received follows:

Verb <i>sum</i>	3 words
3rd conjugation	3 words
2nd declension	3 words
Demonstrative pronouns	3 words
Comparison of adjectives	3 words
Participles	3 words
2nd conjugation	3 words
1st conjugation	4 words
Irregular verbs	5 words
Passive voice	7 words
Subjunctive mood	7 words
3rd declension	6 words

This list of fifty words was plainly an unwieldy affair. There were too many words in it. By a careful combination of the first, second and third conjugation forms with the passive voice and the subjunctive mood forms, ten words were eliminated, though all the *forms* were retained. The two topics, *participles* and *comparison of adjectives*, were also taken out. Their presence in the list greatly increased the difficulty of making a satisfactory arrangement of the words on the printed test and only served to make the test clumsy without adding much to its value.

There were other changes made in the list. Two new topics were arbitrarily included, although they did not have an average of two lessons in the textbooks. These two were the *fourth conjugation* and the *fifth declension*.

It is rather difficult to explain satisfactorily why the fourth conjugation was included. A strict adherence to the plan of including only those topics that had an average of two lessons would have certainly caused it to be left out. But it also would have meant that there would have to be included in the list seven more passive voice forms and seven more subjunctive mood forms. The original list of fifty words contained thirty-two verb forms. It was when this list was being cut to a smaller number of words by combining the verb forms that the fourth conjugation was included. It seemed best to have all four of the conjugations represented and consequently the fourth was included.

The fifth declension was placed in the list because of the fact that the fifth declension word *res* is used more than twice as often as any other noun in Cæsar, Cicero, and Virgil. The proof for this statement comes further on in this study.

There were a few other minor changes, being mostly in the number of forms for each topic. As a result of the revision of the list of forms, the following arrangement was made:

1st conjugation	4 forms
2nd conjugation	4 forms
3rd conjugation	4 forms
4th conjugation	2 forms
Verb <i>sum</i>	3 forms
Verb <i>possum</i>	4 forms
2nd declension	3 forms
3rd declension	6 forms
5th declension	1 form
Demonstrative pronouns	3 forms
Relative pronouns	1 form

Total 35 forms

After it was decided that there should be thirty-five forms divided among the three parts of speech, nouns and verbs, the next step was to decide what cases should be used for the nouns and what tenses for the verbs. There were fourteen nouns and pronouns in the list, but the question was how to divide the cases among them. Again it was decided to adhere to the plan of using only the commonest forms. In this instance it meant using those that occur the greatest number of times in the high school Latin text-books. In deciding this matter use was made of a text* that presents the statistics of syntax in four books of Cæsar, six orations of Cicero, and six books of Vergil. From this book it was found that the different cases have a total number of occurrences as follows:

Nominative	6,088 times
Genitive	3,302 times
Dative	1,672 times
Accusative	9,627 times
Ablative	6,832 times

When these numbers are reduced proportionately to small whole numbers and divided proportionately among the fourteen noun and pronoun forms to be used in the list, the following number of forms to be used in each case is obtained:

Nominative	3 forms
Genitive	2 forms
Dative	1 form
Accusative	5 forms
Ablative	3 forms

Total 14 forms

It was not possible to tell from the data given in the book how many singulars and plurals to use. The question of the number of cases to use with the nouns and pronouns was fairly easy of solution. It was necessary only to turn to the above mentioned book and get the figures that were worked out there. But when the attempt was made to find out what tenses to use with the twenty-one verb forms, a more difficult problem presented itself, since there was

* Byrne, *The Syntax of High School Latin*. University of Chicago Press, 1909.

nothing in Byrne touching on that point. Finally it was decided that in order to get the necessary information a study would have to be made of the Latin authors read in the high schools.

This plan was to examine the first book of Cæsar, the first oration of Cicero, and the first book of Vergil, with a view of finding out how many times the different tenses occur, and at the same time finding the number of first, second, and third persons, and the number of singulars and plurals. Only the first book of each of these authors was used because it was thought that they were fairly representative of the entire works.

In examining these books the following plan of work was used: Cæsar was taken first. Each verb form in the text was picked out and its characteristics marked down on a score sheet. There were four of these score sheets, one for the indicative-active forms, one for the indicative-passive forms, one for subjunctive-active, and one for the subjunctive-passive.

The indicative-active sheet, for example, was divided into six parts, one part being for each of the indicative tenses, present, imperfect, etc. Each of these divisions was divided into three parts, one part for a check mark to indicate that the verb form was in that tense, another part for the person of the verb, first, second, or third, and the third part for the number of the verb, singular or plural. Each of the other score sheets was arranged in a similar fashion.

Suppose that the verb form being examined was *videbat*. At a glance it could be seen that it would be marked on the indicative-active sheet. Turning to that sheet, a mark would be made in the column for the imperfect tense, another mark in the column indicating the third person, and another in the column indicating singular number. In a similar fashion each verb form in the first book of Cæsar, the first oration of Cicero, and the first book of Virgil was examined and its characteristics marked down.

When this work of examining the individual verbs was finished, the results were summarized. The total number of times that each tense occurred was ascertained, as well as the total number of first, second and third persons, and the total number of singulars and plurals for each tense. The results of this study follow:

TOTAL NUMBER OF OCCURRENCES

<i>Indicative Active</i>	<i>Indicative Passive</i>
Pres. 584	Pres. 112
Imperf. 161	Imperf. 23
Future 84	Future 20
Perfect 341	Perfect 69
Fut. Perf. 13	Fut. Perf. 0
Pluperf. 83	Pluperfect 9

<i>Subjunctive Active</i>	<i>Subjunctive Passive</i>
Pres.147	Pres. 26
Imp.244	Imp. 52
Perf. 20	Perf. 5
Plup. 105	Plup. 17

The ratio of the indicative to the subjunctive was found to be about 2 to 1; of the active to the passive, about 5 to 1; of the singular to the plural about 2½ to 1. The third person was used exclusively in Cæsar, while Cicero and Virgil it clearly was used far more than the first and second persons.

Using the results of the investigation as the basis, therefore, the twenty-one verb forms are divided as follows:

<i>Indicative Active</i>	
Present	6 forms
Imperfect	2 forms
Future	1 form
Perfect	4 forms
Pluperfect	1 form

<i>Indicative Passive</i>	
Present	1 form

<i>Subjunctive Active</i>	
Present	2 forms
Imperfect	3 forms
Pluperfect	1 form

Total21 forms

In general, then, the thirty-five words are divided into two groups: fourteen nouns and pronouns and twenty-one verbs. These words are divided among the declensions, conjugations, cases, tenses, etc., according to the following scheme which is the result of the investigations made:

NOUNS

2nd declension	3	Nominative case	3
3rd declension	6	Genitive	2
5th declension	1	Dative	1
Demonstr. Pro.	3	Accusative	5
Relative Pro.	1	Ablative	3
Total	14	Total	14

VERBS

1st conjugation	4	<i>Indicative Active</i>	
2nd conjugation	4	Present	6
3rd conjugation	4	Imperfect	2
4th conjugation	2	Future	1
Verb <i>sum</i>	3	Perfect	4
Verb <i>possum</i>	4	Pluperfect	1
Total	21	<i>Indicative Passive</i>	
		Present	1
		<i>Subjunctive Active</i>	
		Present	2
		Imperfect	3
		Pluperfect	1
		Total	21

The nouns are in either the singular or the plural. There was nothing to show how many of each to use. Of the verbs, sixteen are in the singular and five in the plural. Practically all of them are in the third person, as the results of the investigation seem to warrant this.

In deciding what Latin words to use the original plan of using only the commonest forms was applied. In this case it meant the using of those words that occur the greatest number of times in the Latin books usually read in high school.

In determining what these words were, a study was made of a book* that contains the vocabulary of Cæsar, Cicero and Vergil as read by high school pupils. The results of this study are given below. The words that are underscored are the ones that are used in the list of forms. They are the words of most frequent occurrence.

TOTAL NUMBER OF TIMES THESE WORDS OCCUR
IN CAESAR, CICERO, AND VERGIL

NOUNS

1st declension.....	causa, 145; terra, 131; copia, 114; fortuna, 80
2nd declension.....	bellum, 270; locus, 234; castrum, 184; populus, 169; animus, 159.
3rd declension.....	hostis, 252; pars, 207; civitas, 145; tempus, 139; legio, 119; pater and virtus, 115.
5th declension.....	res, 584; dies, 180.

PRONOUNS

Personal.....	ego, 584; tu, 495; sui, 688.
Demonstrative.....	hic, 1323; is, 1093; ille, 462; ipse, 354.
Relative.....	qui, 1850.
Interrogative.....	quis, 598.

VERBS

Irregular.....	sum, 1783; possum, 416; fero, 199; volo, 132.
1st conjugation.....	do, 242; puto, 70; voco, 68.
2nd conjugation....	video, 250; habeo, 188, teneo, 145.
3rd conjugation.....	dico, 318; peto, 107; mitto, 203.
4th conjugation....	venio, 185.

It will be noticed that in most cases there is only one word underscored in a group of words. This means that as far as possible the same word has been used all through the list. For example, *video* is used for all second conjugation forms, *dico* for all third conjugations forms, etc. This device was used in

*Lodge, *The Vocabulary of High School Latin*. Teachers College, Columbia University, 1915.

[illegible]

is expected that these words will be mixed indiscriminately, but in the final form they will be arranged in the order of their difficulty to be determined by experimenting with the test.

The next four columns are for the facts to be given about the nouns, the next four, for the pronouns, and the next six for the verbs. The last column is for the score made in giving the facts for each form attempted.

Thus it is easy for the pupil to give the information with the least confusion. When he decides that the word is a verb form, he at once glances to the group of columns where the verb facts are to be given, fills in the blanks in the order in which he meets them, and goes on to the next word.

The test should not be given to a class until it has had almost a full year's work in Latin. This means that it should not be used until the end of the first year's work. It can be repeated during the second year and can be continued on through to the end of the fourth year. As has been mentioned, the words are ultimately to be arranged in the order of their difficulty, the most difficult words coming at the end of the list. In this manner, and with a time limit, the test can be used with all the Latin classes.

It was the original plan to get the test into such shape by early spring that it could be tried out before the schools closed for the summer. But it was found that it was almost impossible to get it finished, and consequently this work has to be carried over to the next term.

When the test is given at that time, it will be for the purpose of deciding on the order of the words and the value that each word is to have in scoring the results. This value can be determined by the number of times that each word is correctly or incorrectly spotted. It may be necessary to change some of the forms also.

In conclusion, it may be well to emphasize the central plan used in devising the test. Throughout all of the work the idea has been to use only the forms of most common occurrence. The examination of the sixteen first-year Latin books gave the general framework upon which the whole test was built. It gave the number of nouns, pronouns and verbs to use. And these numbers represented as nearly as possible the relative amount of emphasis that the different parts of speech received. It also showed how this emphasis was distributed, more of it being placed on certain conjugations and declensions than on some of the others.

The study of the syntax of the high school Latin books showed the relative emphasis placed on the different cases, and the study of the first books of the different high school Latin texts showed how the rela-

tive emphasis should be placed on the different cases, and the study of the first books of the different high school Latin texts showed how the emphasis should be placed on certain tenses and moods and not on others. And finally, the study of the words used in the high school Latin texts gave the words that occur most frequently.

The test as it now stands is the result of all these investigations. It consists of only those forms that from actual occurrence in the texts used in high school Latin, and from the emphasis received in first year Latin books, can be fairly called the most commonly used forms.

Whether a test thus put together and made up can be made of value in testing the pupil's knowledge of Latin forms remains to be seen. Certainly, there is no good reason for any pupil or teacher objecting to the test on the grounds that it contains unfair words or forms. As nearly as it was possible to make it, it is the essence of all the high school Latin forms put into one small list of words. And as such it ought readily to find its place in the rapidly increasing list of scientific tests for measuring the work of the class room.

TRANSPORTATION OF PUPILS IN PITT COUNTY, N. C.

(Concluded from page 216)

depot for the trucks at that station. Garage men, drivers, and the principal of the school were advised that no bills would be paid for supplies of any nature whatsoever unless the driver carried with him written order for same countersigned by the principal. Our plan, in brief, was this:

"If the driver was in need of gasoline, written order was obtained for same from the principal. This order specified the exact amount the driver was to receive. A duplicate of this order was kept on file in the principal's office. Upon the delivery of the original order, the driver received his gasoline from the garage. Original order was filed and attached to statement for supplies for that particular truck when it was sent to the principal at the end of the month. The principal of the school then checked both the original order and the items listed on the account with duplicate orders on file in his office. No items were paid for unless original order authorizing the same was found. We found that by adopting this plan, we saved a considerable amount."—SUPT. R. G. FITZGERALD.

From bulletin on "Consolidation of Schools and Cost of Transportation," published by the State Department of Education, Raleigh, N. C.